

Mini HI-FI Component System

Operating Instructions

Getting Started

Operations

Additional Information

WARNING

To reduce the risk of fire, do not cover the ventilation opening of the apparatus with newspapers, tablecloths, curtains, etc.

Do not place the naked flame sources such as lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Do not expose batteries or apparatus with battery-installed to excessive heat such as sunshine, fire or the like.

The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.

Excessive sound pressure from earphones and headphones can cause hearing loss.

CAUTION

The use of optical instruments with this product will increase eye hazard.

CLASS 1 LASER PRODUCT LUOKAN 1 LASERLAITE KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear exterior.

Notice for customers: the following information is only applicable to equipment sold in countries applying EU directives.

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku, Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters, please refer to the addresses given in separate service or guarantee documents.



Disposal of Old
Electrical &
Electronic
Equipment
(Applicable in the
European Union and
other European
countries with
separate collection
systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Applicable accessories: Remote commander



Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste. On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources.

In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment. For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries. For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Note on DualDiscs

A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

Music discs encoded with copyright protection technologies

This product is designed to playback discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

Note on copyright-protected content

The transferred music is limited to private use only. Use of the music beyond this limit requires permission of the copyright holders.

License and Trademark Notice

- MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.
- Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
- This product contains technology subject to certain intellectual property rights of Microsoft. Use or distribution of this technology outside of this product is prohibited without the appropriate license(s) from Microsoft.

Table of Contents

Guide to parts and controls5
Getting Started
Hooking up the system securely8
Setting the clock9
Operations
Playing a CD/MP3 disc10
Listening to the radio11
Before using the USB device 12
Transferring music from a disc to a USB device13
Playing a file from the USB device15
Creating your own program (Program Play)16
Using optional audio components17
Adjusting the sound18
Changing the display18
Changing the illumination brightness19
Using the timers20

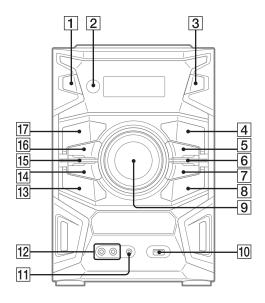
Additional Information

Precautions	21
Troubleshooting	22
Messages	27
Specifications	20

Guide to parts and controls

This manual mainly explains operations using the remote, but the same operations can also be performed using the buttons on the unit having the same or similar names.

Main unit



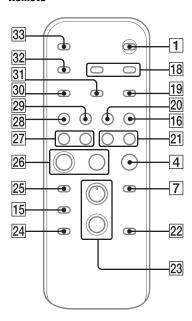
To lock the buttons on the unit (Child lock function)

You can lock the buttons except $I/(\frac{1}{2})$ on the unit to prevent them from being operated by mistake.

Hold down \blacksquare on the unit until "CHILD LOCK ON" or "CHILD LOCK OFF" appears on the display. The buttons except I/\circlearrowleft on the unit will be locked or unlocked.

Note that the child lock will be cancelled when you disconnect the power cord.

Remote



- 1 I/ (on/standby) button
 Press to turn on or off the system.
- 2 Remote sensor
- 4 (stop) button

 Press to stop playback or
- transferring.

 5 REC TO USB button (page 13)
- Press to transfer music from a disc to the connected optional USB device.
- 6 DSGX button (page 18)
 Press to select the sound effect.
- 7 ENTER button
 Press to enter/confirm the settings.

8 TUNING + button

Press to tune to the desired station.

▶►I (go forward) button

Press to select a track or file.

▶► (fast forward) button

Press to find a point in a track or file.

9 VOLUME control

Turn to adjust the volume.

10 ← (USB) port

Connect an optional USB device.

11 PHONES jack

Connect the headphones.

12 DVD/PC IN L/R (audio in L/R) jacks

Connect an audio component (Portable audio player, etc.).

13 TUNING – button

Press to tune to the desired station.

I◄ (go back) button

Press to select a track or file.

◄ (rewind) button

Press to find a point in a track or file.

14 OPTIONS button (page 12, 14, 19)

Press to enter or exit the option menus.

15 EQ button (page 18)

Press to select the sound effect.

16 FUNCTION button

Press to select the function.

17 ► II (play/pause) button

Press to start or pause playback.

18 CLOCK/TIMER SELECT button (page 20)

CLOCK/TIMER SET button (page 9, 20)

Press to set the clock and the Play Timer.

19 REPEAT/FM MODE button (page 10, 11, 15)

Press to listen to a disc, a USB device, a single track or file repeatedly.

Press to select the FM reception mode (monaural or stereo).

20 TUNER/BAND button

Press to select the tuner function. Press to select FM or AM reception mode.

21 ◀◀/▶▶ (rewind/fast forward) button

Press to find a point in a track or file.

←/→ button

Press to select the menu items.

22 + (select folder) button (page 10, 15, 16)

Press to select a folder.

23 VOLUME +/- button

Press to adjust the volume.

24 — (select folder) button (page 10, 15, 16)

Press to select a folder.

25 CLEAR button (page 17)

Press to delete a pre-programmed track or file.

26 ► (play) button

Press to start playback.

II (pause) button

Press to pause playback.

27 I◄◄/►►I (go back/go forward) button

Press to select a track or file.

+/- (tuning) button

Press to tune to the desired station.

28 USB button

Press to select the USB function.

29 CD button

Press to select the CD function.

30 TUNER MEMORY button (page 11)

Press to preset the radio station.

91 PLAY MODE/TUNING MODE button (page 10, 11, 16)

Press to select the play mode of a CD, MP3 disc or USB device. Press to select the tuning mode.

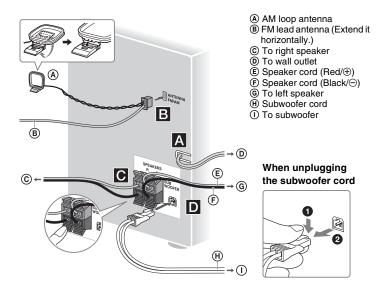
32 DISPLAY button (page 9, 17, 18)

Press to change the information on the display.

33 SLEEP button (page 20)

Press to set the Sleep Timer.

Hooking up the system securely



A Power

Connect the power cord to a wall outlet. If the plug does not fit the wall outlet, detach the supplied plug adaptor (only for models equipped with an adaptor).

B Antennas

Find a location and an orientation that provide good reception when you set up the antennas.

Keep the antennas away from the speaker cords, the power cord and the USB cable to avoid picking up noise.

C Speakers

Insert only the stripped portion of the cord.

Subwoofer (MHC-EX99/EX900 only)

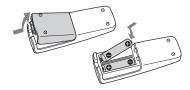
Connect the subwoofer to the SUBWOOFER jack with the subwoofer cord.

Place the subwoofer vertically to obtain a better bass reproduction. Also, position the subwoofer:

- on a solid floor where resonance is unlikely to occur.
- at least a few centimeters away from the wall.
- away from the center of the room or place a bookshelf against a wall, to avoid generating a standing wave.

Inserting batteries

Insert the two supplied R6 (size AA) batteries, matching the polarities shown below.



Notes

- Do not mix an old battery with a new one or mix different types of batteries.
- If you do not use the remote for a long period of time, remove the batteries to avoid damage from battery leakage and corrosion.
- Batteries installed devices shall not be exposed to excessive heat such as sunshine, fire or the like.

When carrying this system

Remove a disc if inserted and turn off the system, and then unplug the power cord.

Setting the clock

Use buttons on the remote to set the clock.

- 1 Press I/ $^{\circlearrowleft}$ to turn on the system.
- 2 Press CLOCK/TIMER SET.

If "PLAY SET" flashes, press ◄◄/
▶► repeatedly to select "CLOCK," and then press ENTER.

- 3 Press I ✓ ✓ / ▶ I repeatedly to set the hour, and then press ENTER.
- 4 Use the same procedure to set the minutes.

Note

The clock settings are lost when you disconnect the power cord or if a power failure occurs.

To display the clock when the system is off

Press DISPLAY repeatedly until the clock is displayed. The clock is displayed for about 8 seconds.

Operations

Playing a CD/MP3 disc

1 Select the CD function.

Press CD (or FUNCTION repeatedly).

2 Place a disc.

Press ♠ on the unit, and place a disc with the label side up on the disc tray. To close the disc tray, press ♠ on the unit

3 Start playback.

Press \blacktriangleright (or \blacktriangleright II on the unit).

Other operations

То	Press
Pause playback	II (or ►II on the unit). To resume playback, press the button again.
Stop playback	■.
Select a folder on an MP3 disc	+/- repeatedly.
Select a track or file	 .
Find a point in a track or file	Hold down ◀◀/▶▶ during playback, and release the button at the desired point.
Select Repeat Play	REPEAT repeatedly until "REP" or "REP1" appears.

To change the play mode

Press PLAY MODE repeatedly while the player is stopped. You can select normal play ("—" for all MP3 files in the folder on the disc), shuffle play ("SHUF" or "—" SHUF*" for folder shuffle), or program play ("PGM").

When playing a CD-DA (audio) disc,
 (SHUF) Play performs the same operation as normal (SHUF) Play.

Note on Repeat Play

"REP1" indicates that a single track or file is repeated until you stop it.

Note on shuffle play mode

When you turn off the system, the selected shuffle play mode ("SHUF" or " SHUF") is cleared and the play mode returns to normal play mode.

Notes on playing MP3 discs

- Do not save other types of files or unnecessary folders on a disc that has MP3 files.
- · Folders that have no MP3 files are skipped.
- MP3 files are played back in the order that they are recorded onto the disc.
- The system can only play MP3 files that have a file extension of ".mp3".
- Even when file name has the ".mp3" file extension, if the actual file differs, playing this file may generate a loud noise which could damage the speaker system and the system may malfunction.
- · The maximum number of:
 - folders is 255 (including the root folder).
 - MP3 files is 512.
- folder levels (the tree structure of files) is 8.
- Compatibility with all MP3 encoding/writing software, recording device, and recording media cannot be guaranteed. Incompatible MP3 discs may produce noise or interrupted audio or may not play at all.

Notes on playing multisession discs

- If the first session on the disc is a CD-DA session, the other sessions on the disc cannot be recognized regardless of the session format; only CD-DA tracks in the first session can be played back.
- If the session format for the first session is CD-ROM and the following sessions are recorded in the same format, the system will continue to play back MP3 files accordingly in multiple sessions until the system encounters another session recorded in a different format.

Listening to the radio

1 Select "TUNER FM" or "TUNER AM."

Press TUNER/BAND (or FUNCTION) repeatedly.

2 Perform tuning.

For automatic scanning

Press TUNING MODE repeatedly until "AUTO" appears, and then press +/- (or TUNING +/- on the unit). When a station is found, scanning stops automatically, and "TUNED" and "ST" (for stereo programs only) light up on the display.



If "TUNED" does not light up and the scanning does not stop, press ■ to stop scanning, then perform manual tuning (below).

When you tune to a station that provides RDS services, the station name appears on the display.

For manual tuning

Press TUNING MODE repeatedly until "MANUAL" appears, and then press +/- (or TUNING +/- on the unit) repeatedly to tune to the desired station

qiT

To reduce static noise on a weak FM stereo station, press FM MODE repeatedly until "MONO" appears to turn off stereo reception.

Presetting a radio station

Use buttons on the remote to preset stations.

- 1 Tune to the desired station.
- 2 Press TUNER MEMORY to select the tuner memory mode.



3 Press +/- repeatedly to select the desired preset number.

If another station is already assigned to the selected preset number, the station is replaced by the new station.

- 4 Press ENTER to store the station.
- 5 Repeat steps 1 through 4 to store other stations.

You can preset up to 20 FM and 10 AM stations. The preset stations are retained for about half a day even if you disconnect the power cord or if a power failure occurs.

To bring up a preset radio station, press TUNING MODE repeatedly until "PRESET" appears, and then press +/- repeatedly to select the desired preset number.

Before using the USB device

Check the websites below for the information about compatible USB devices.

For customers in Europe and Russia: http://support.sony-europe.com/ For customers in Latin America: http://www.sony-latin.com/index.crp For customers in other countries/regions: http://www.sony-asia.com/support

Notes

- When USB cable connection is necessary, use the USB cable supplied with the USB device.
- When the USB device is connected, "READING" appears and "USB MEMORY" lights up on the display.
- It may take about 10 seconds before "READING" appears depending on the type of USB device connected.
- Do not connect the system and the USB device through a USB hub.
- When the USB device is connected, the system reads all the files on the USB device.
 If there are many folders or files on the USB device, it may take a long time to finish reading the USB device.
- With some connected USB devices, after an operation is performed, there may be a delay before it is performed by this system.
- Compatibility with all encoding/writing software cannot be guaranteed. If audio files on the USB device were originally encoded with incompatible software, those files may produce noise or interrupted audio, or may not play at all.

- This system cannot transfer music from a disc or play audio files on the USB device in the following cases.
 - When the number of audio files in a folder exceeds 999.
 - When the total number of audio files on a USB device exceeds 5,000.
 - When the number of folders on a USB device exceeds 255 (including the "ROOT" and "MUSIC" folders, and excluding empty folders).

These numbers may vary depending on the file and folder structure. Do not save other types of files or unnecessary folders on a USB device that has audio files.

To select the memory on the USB device

If the USB device has more than one memory (for example, internal memory and a memory card), you can select which memory to use and then start playback or transferring.

You cannot select a memory during playback or transferring. Make sure to select a memory before starting playback or transferring.

- Press USB (or FUNCTION repeatedly) to select the USB function.
- 2 Connect the USB device to the ← (USB) port.
- **3** Press OPTIONS on the unit in stop mode.

"MEM SEL" appears. If an audio file or a folder is selected, "ERASE" appears instead. Press ◄◄/►► repeatedly to select "MEM SEL."

- 4 Press ENTER.
- 5 Press ◄◄/►► repeatedly to select a memory number. Proceed to step 6 if only one memory can be selected. To cancel this operation, press OPTIONS.
- 6 Press FNTFR.

To use the system as a battery charger

You can use the system as a battery charger for USB devices that have a rechargeable function when the system is on.

The charging begins when the USB device is connected to the ← (USB) port on the unit. The charging status appears on the USB device's display. For details, refer to the operation manual of your USB device.

Note on charging the USB device with this system

You cannot use the system as a battery charger in the following cases.

- The CD player/USB device power is turned off and the tuner function is selected. See "To improve disc loading performance" (page 26).
- When the system is off.

Transferring music from a disc to a USB device

You can connect an optional USB device to the \iff (USB) port on the unit and transfer music from a disc to the USB device.

You can transfer music from a CD-DA disc or MP3 disc only.

The audio format of files transferred by this system is MP3.

The amount of free space required on the USB device is about 1 MB per minute when transferring music from a CD. Required free space may be larger when transferring music from an MP3 disc. You can easily transfer all the music on a disc to a USB device (CD SYNC). You can also transfer a track or MP3 file that is currently being played back (REC1).

- 1 Connect the USB device to the ← (USB) port.
- 2 Select the CD function.
 Press CD (or FUNCTION repeatedly).
- 3 Place a disc.
- 4 Set the USB device to stand by for transferring.

Synchronized transfer (CD SYNC):

Press REC TO USB on the unit.
To transfer only your favourite CD tracks or MP3 files, create your own program beforehand (see "Creating your own program" (page 16)).
To transfer only MP3 files that are stored in a specific folder on the MP3 disc, press PLAY MODE repeatedly until "\(\begin{array}{c} \begin{arra

REC1:

Start playback of the track or MP3 file you want to transfer, then press REC TO USB on the unit.

5 Press ENTER to start transferring.

When using CD SYNC

When the transfer is completed, access to the USB device and the CD player stop automatically.

When using REC1

When the transfer is completed, access to the USB device stops automatically and the CD player continues playback.

To stop transferring

Press .

To erase audio files or folders from the USB device

Note that you cannot erase audio files and folders in shuffle play mode or program play mode.

- 1 Connect the USB device to the ← (USB) port.
- 2 Select the USB function. Press USB (or FUNCTION repeatedly).
- 3 Press ◄◄/►► or +/repeatedly to select the audio file or folder you want to erase.
- **4** Press OPTIONS on the unit in stop mode.
- 5 Press I◄◄/►►I repeatedly to select "ERASE," and then press ENTER.

To cancel the erase operation, press OPTIONS.

6 Press ENTER.

Folder and file generation rules

When first transferring music to a USB device, a "MUSIC" folder is created below the "ROOT" folder and a transfer mode-oriented folder ("CD-DA," "CD-MP3," "REC1" or "PROGRAM") is created within the "MUSIC" folder. Folders and files are generated within any of the transfer mode-oriented folders as follows.

CD SYNC1)

Music source	Folder name	File name
MP3	Same as the music source ²⁾	
CD-DA	"CDDA001"3)	"TRACK001"4)

REC₁

Music source	Folder name	File name
MP3	"REC1" ⁵⁾	Same as the music source ²⁾
CD-DA		"TRACK001" ⁴⁾

¹⁾ In Program Play mode, the folder name is "PGM_xxx," and the file name depends on the music source (CD-DA disc or MP3 disc).

²⁾ Up to 32 characters of the name are assigned.

³⁾ Folder numbers are assigned serially thereafter up to the maximum 999.

⁴⁾ File numbers are assigned serially thereafter.

⁵⁾ A new file is created in the "REC1" folder each time REC1 is performed.

Notes

- When transferring music from a CD, the tracks are transferred as 128 kbps MP3 files.
 When transferring music from an MP3 disc,
 MP3 files are transferred at the same bit rate as that of the original MP3 files.
- If you start transferring in shuffle play mode, repeat play mode or in program play mode (when no tracks or MP3 files are programmed), the selected play mode is automatically cancelled and the play mode switches to normal play mode.
- While transferring music from an MP3 disc, no sound is output and "HI-SPEED" appears.
- CD text information is not transferred in the created MP3 files.
- If you cancel the process in the middle of music transfer, an incomplete MP3 file will be created up to the point when the transfer was stopped.
- · Transferring stops automatically if:
 - the USB device runs out of space.
 - the number of audio files on the USB device reaches the limit for the number that the system can recognize.
- If the folder to be erased contains non-MP3/ WMA/AAC format files or sub folders, these are not erased.
- If a folder or file that you are trying to transfer already exists on the USB device with the same name, a sequential number is added after the name without overwriting the original folder or file.
- Do not remove the USB device or disconnect the power cord during transfer or erase operations. Doing so may corrupt the data on the USB device or damage the USB device itself.

Playing a file from the USB device

The audio formats that can be played back on this system are:

MP3, WMA* or AAC*

* Files with DRM (Digital Rights Management) copyright protection cannot be played back on this system. Files downloaded from an online music store may not be played back on this system.

1 Select the USB function.

Press USB (or FUNCTION repeatedly).

2 Connect a USB device to the ← (USB) port.

When the USB device is connected, the display changes as follows:

"READING" → "STORAGE*"

* When connecting the USB device, the volume label is displayed next if recorded.

3 Start playback.

Press \blacktriangleright (or \blacktriangleright II on the unit).

Other operations

То	Press
Pause playback	II (or ►II on the unit). To resume playback, press the button again*.
Stop playback	■.
Select a folder	+/- repeatedly.
Select a file	 ◄4/▶▶ .
Find a point in a file	Hold down ◀◀/▶▶ during playback, and release the button at the desired point.
Select Repeat Play	REPEAT repeatedly until "REP" or "REP1" appears.

^{*} When playing a VBR MP3 file, the system may resume playback from a different point.

To change the play mode

Press PLAY MODE repeatedly while the USB device is stopped. You can select normal play ("—" for all files in the folder on the USB device), shuffle play ("SHUF" or "—" SHUF"), or program play ("PGM").

Note on Repeat Play

"REP" indicates that all audio files on a USB device are repeated until you stop playback.

Note on shuffle play mode

When you turn off the system, the selected shuffle play mode ("SHUF" or "SHUF") is cleared and the play mode returns to normal play mode ("").

Notes

- The following instances can increase the time it takes to start playback:
 - a USB device recorded with a complicated tree structure.
 - the memory capacity is excessive.
- The system can play back to a depth of 8 folders only.
- This system does not necessarily support all the functions provided in a connected USB device.
- Resume play is cancelled when you turn off the system.
- Files and folders are displayed in the order of their creation on the USB device.
- The playback order for the system may differ from the order of the connected USB device.
- · Folders that have no audio files are skipped.
- The file formats that this system can play are as follows:
 - MP3: file extension ".mp3"
 - WMA: file extension ".wma"
 - AAC: file extension ".m4a", ".mp4" or ".3gp"

Note that even when file names have the above file extensions, if the actual files differ, playing these files may generate a loud noise which could damage the speaker system and the system may malfunction.

Creating your own program

(Program Play)

Use buttons on the remote to create your own program.

1 Select the desired function.

CD

Press CD (or FUNCTION repeatedly) to select the CD function.

USB

Press USB (or FUNCTION repeatedly) to select the USB function.

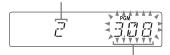
2 Select the play mode.

Press PLAY MODE repeatedly until "PGM" appears while the player is stopped.

3 Select the desired track or file number.

Press I◀◀/▶▶ repeatedly until the desired track or file number appears. When programming MP3/WMA/AAC files, press 📇 +/- repeatedly to select the desired folder, and then select the desired file

Selected track or file number



Total playing time of the selected track or file

4 Program the selected track or file.

Press ENTER to enter the selected track or file.

CD

"---" appears when the total program time exceeds 100 minutes for a CD or when you select an MP3 file.

USB

The total program time cannot be displayed, so "----" appears.

5 Repeat steps 3 through 4 to program additional tracks or files, up to a total of 25 tracks or files.

6 To play your program of tracks or files, press ►.

The program remains available until you open the disc tray. To play the same program again, select the CD function, and then press ▶.

To cancel Program Play

Press PLAY MODE repeatedly until "PGM" disappears while the player is stopped.

To delete the last track or file of the program

Press CLEAR while the player is stopped.

To view program information, such as total track number of the program

Press DISPLAY repeatedly.

Using optional audio components

1 Prepare the sound source.

Connect additional audio component to the DVD/PC IN L/R jacks on the unit using an audio analog cord (not supplied).

2 Adjust the volume level to minimum.

Press VOLUME – repeatedly (or turn the VOLUME control on the unit) until "VOL MIN" appears on the display.

3 Select the PC function.

Press FUNCTION repeatedly.

4 Start playback.

Start playback of the connected component and adjust the volume.

Notes

- The system may enter standby mode automatically if the volume level of the connected component is too low. Adjust the component's volume accordingly. See "To turn off the automatic standby function" (page 27).
- Make sure to turn down the volume to minimum level before connecting or disconnecting an audio component.
 Otherwise, noise may be generated, the system may malfunction, or "PROTECT" may appear on the display (page 22).

Adjusting the sound

То	Press
Generate a more dynamic sound (Dynamic Sound Generator X-tra)	DSGX on the unit.
Set the sound effect	EQ.

To turn on the subwoofer (MHC-EX99/EX900 only)

- 1 Press OPTIONS on the unit.
- 2 Press I◄◄/▶►I repeatedly to select "S-WOOFER," and then press ENTER.
- 3 Press I◄◄/►►I repeatedly to select "SW ON," and then press ENTER.

To turn off the subwoofer, select "SW OFF," and then press ENTER.

Changing the display

То	Press
Change	DISPLAY repeatedly
information on the	when the system is
display*	turned on.
Change Display	DISPLAY repeatedly
mode	when the system is
(See below.)	turned off.

- * For example, you can view CD/MP3 disc information or the USB device information, such as:
 - track or file number during normal play.
 - track or file name ("",") during normal play.
 - artist name ("♠") during normal play.
 - album or folder name ("") during normal play.
 - total playing time and total number of tracks on the CD-DA disc (only when normal play mode is selected and the player is stopped).
- total number of folders (albums) on the MP3 disc (only when normal play mode is selected and the player is stopped).
- volume label if it exists on the disc or the USB device (only when normal play mode is selected and the USB device is in stop mode).

The system offers the following display modes.

Display mode	When the system is off,
Demonstration	The demonstration is displayed.
Power Saving Mode ¹⁾	The display is turned off to conserve power. The timer and clock continue to operate.
Clock ²⁾	The clock is displayed.

You cannot set the clock in Power Saving Mode.

²⁾ The clock display automatically turns to Power Saving Mode after 8 seconds.

Notes on the display information

- Characters that cannot be displayed appear as
 ""
- · The following are not displayed:
 - total playing time for an MP3 disc and USB device.
 - remaining playing time for a file.
- The following are not displayed correctly:
 - elapsed playing time of an MP3 file encoded using a VBR (variable bit rate).
 - folder and file names that do not follow either the ISO9660 Level 1, Level 2 or Joliet in the expansion format.
- · The following are displayed:
 - remaining playing time for a track.
 - ID3 tag information for MP3 files when ID3 version 1 and version 2 tags are used (ID3 version 2 tag information display has priority when both ID3 version 1 and version 2 tags are used for a single MP3 file).
 - up to 15 characters of ID3 tag, WMA tag and AAC tag information using uppercase letters (A to Z), numbers (0 to 9), and symbols ("\$ % '() * + , . / < = > @ [\] _ ` { | } !? ^\).

Changing the illumination brightness

То	Do this
Change the brightness of the illumination around the VOLUME control	1 Press OPTIONS on the unit. 2 Press I◀◀/▶►I 1 repeatedly to select "ILLUMI," and then press ENTER.
	3 Press I ← / ► I repeatedly to select the desired mode, and then press ENTER.

Using the timers

The system offers two timer functions. If you use both timers, the Sleep Timer has priority.

Use buttons on the remote to use the timer functions.

Sleep Timer:

You can fall asleep to music.

Press SLEEP repeatedly.

If you select "AUTO," the system automatically turns off after the current disc or USB device stops, or within 100 minutes.

Play Timer:

You can wake up to CD, FM/AM reception or USB device at a preset time. Make sure you have set the clock.

1 Prepare the sound source.

Prepare the sound source, and then press VOLUME +/- to adjust the volume.

To start from a specific CD track or audio file, create your own program (page 16).

2 Select the timer set mode.

Press CLOCK/TIMER SET.

3 Set the play timer.

Press I◀◀/▶▶I repeatedly to select "PLAY SET," and then press ENTER. "ON TIME" appears, and the hour indication flashes.

4 Set the time to start playback.

Press | Tepeatedly to set the hour, and then press ENTER.

Use the same procedure to set the minutes

"OFF TIME" appears and the hour indication flashes on the display.

5 Set the time to stop playback.

Use the same procedure as in step 4.

6 Select the sound source.

Press | | repeatedly until the desired sound source appears, and then press ENTER. The display shows the timer settings.

7 Turn off the system.

Press I/(1).

The system turns on 15 seconds before the preset time. If the system is already on at the preset time, the Play Timer will not be activated.

Do not operate the system from the time the system turns on until the playback starts.

To check the setting

- 1 Press CLOCK/TIMER SELECT.
- 2 Press I◀◀/▶►I repeatedly to select "PLAY SEL," and then press ENTER.

To cancel the timer

Repeat the same procedure as above until "OFF" appears in step 2 of "To check the setting," and then press ENTER.

To change the setting

Start over from step 1 of "Using the timers."

Additional Information

Precautions

Discs that this system CAN play

- · Audio CD
- CD-R/CD-RW (audio data/MP3 files)

Discs that this system CANNOT play

- · CD-ROM
- CD-R/CD-RW other than those recorded in music CD format or MP3 format conforming to ISO9660 Level 1/Level 2, Joliet
- CD-R/CD-RW recorded in multisession that have not ended by "closing the session"
- CD-R/CD-RW of poor recording quality, CD-R/CD-RW that have scratches or are dirty, or CD-R/CD-RW recorded with an incompatible recording device
- CD-R/CD-RW which is finalized incorrectly
- Discs containing files other than MPEG 1 Audio Layer-3 (MP3) files
- Discs of non-standard shape (for example, heart, square, star)
- Discs that have adhesive tape, paper, or sticker attached to them
- Rental or used discs with attached seals where the glue extends beyond the seal
- Discs that have labels printed using ink that feels tacky when touched

Notes on discs

- Before playing, wipe the disc with a cleaning cloth from the centre outward to the edge.
- Do not clean discs with solvents, such as benzine, thinner, or commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose discs to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight.

On safety

- Completely disconnect the power cord (mains lead) from the wall outlet (mains) if it is not going to be used for an extended period of time. When unplugging the unit, always grip the plug. Never pull the cord itself.
- Should any solid object or liquid get into the system, unplug the system, and have it checked by qualified personnel before operating it again.
- AC power cord must be changed only at the qualified service shop.

On placement

- Do not place the system in an inclined position or in locations that are extremely hot, cold, dusty, dirty, or humid or lacking adequate ventilation, or subject to vibration, direct sunlight or a bright light.
- Be careful when placing the unit or speakers on surfaces that have been specially treated (for example, with wax, oil, polish) as staining or discoloration of the surface may result.
- If the system is brought directly from a cold to a warm location or is placed in a very damp room, moisture may condense on the lens inside the CD player, and cause the system to malfunction. In this situation, remove the disc, and leave the system turned on for about an hour until the moisture evaporates.

On heat buildup

- Heat buildup on the unit during operation is normal and is not cause for alarm.
- Do not touch the cabinet if it has been used continuously at a high volume because the cabinet may have become hot.
- · Do not obstruct the ventilation holes.

On the speaker system

This speaker system is not magnetically shielded, and the picture on nearby TV sets may become magnetically distorted. In this situation, turn off the TV, wait 15 to 30 minutes, and turn it back on. If there is no improvement, move the speakers far away from the TV.

Cleaning the cabinet

Clean this system with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as thinner, benzine, or alcohol.

Troubleshooting

- Make sure the power cord and speaker cords are correctly and firmly connected.
- 2 Find your problem in the checklist below, and take the indicated corrective action.

If the issue persists, contact your nearest Sony dealer.

If "PROTECT" appears on the display

Immediately unplug the power cord, and check the following items after "PROTECT" disappears.

- Are the + and speaker cords shortcircuited?
- Is anything blocking the ventilation holes on the back of the system? After you have checked these above items and found to be all right, reconnect the power cord, and turn on the system. If the issue persists, contact your nearest Sony dealer.

General

The demonstration appears on the display after plugging in the power cord even though the system is not turned on.

Press DISPLAY once while the system is off. The demonstration disappears.

The system does not turn on.

Is the power cord plugged in?

The system has entered standby mode unexpectedly.

This is not a malfunction. The system enters standby mode automatically in about 30 minutes when there is no operation and audio signal output. See "To turn off the automatic standby function" (page 27).

There is no sound.

- Are the + and speaker cords shortcircuited?
- Are you using only the supplied speakers?
- Is anything blocking the ventilation holes on the back of the system?

Sound comes from one channel, or the left and right volumes are unbalanced.

- Place the speakers as symmetrically as possible.
- Connect only the supplied speakers.

Severe hum or noise.

- Move the system away from sources of noise
- Connect the system to a different wall outlet.
- Install a noise filter (available separately) to the power cord.

The remote does not function.

- Remove any obstacles between the remote and the remote sensor on the unit, and position the unit away from fluorescent lights.
- · Point the remote at the system's sensor.
- · Move the remote closer to the system.

Except I/U, no buttons on the unit work, and "CHILD LOCK" appears on the display.

The child lock function has been enabled. To disable the child lock, hold down ■ on the unit until "CHILD LOCK OFF" appears on the display.

CD/MP3 player

The sound skips, or the disc will not play.

- · Wipe the disc clean, and replace it.
- Move the system to a location away from vibration (for example, on top of a stable stand).
- Move the speakers away from the system, or place them on separate stands. At high volume, speaker vibration may cause the sound to skip.

Play does not start from the first track.

Return to Normal Play by pressing PLAY MODE repeatedly until both "PGM" and "SHUF" disappear.

Starting playback takes more time than usual.

The following instances can increase the time it takes to start playback.

- a disc recorded with a complicated tree structure
- a disc recorded in multisession mode
- a disc that has not been finalized (a disc to which data can be added)
- a disc that has many folders

The disc tray does not open and "LOCKED" appears.

Contact your Sony dealer or local authorized Sony service facility.

The connected USB device cannot be charged.

Select a function other than tuner function or turn on the CD player/USB device power. See "To improve disc loading performance" (page 26).

You cannot start transferring to a USB device.

The following problems may have occurred.

- The USB device is full.
- The number of files and folders on the USB device has reached the upper limit.
- The USB device is write-protected.

Transferring is stopped before it is finished.

- You are using an unsupported USB device. Check the information on the websites about compatible USB devices (page 12).
- The USB device is not formatted correctly. Refer to the USB device operation manual for how to format.
- Turn off the system and remove the USB device. If the USB device has a power switch, turn the USB device off and then on again after removing it from the system. Then perform transferring again.
- If the transfer and erase operations are repeated multiple times, the file structure within the USB device becomes fragmented. Refer to the USB device operation manual for how to deal with this problem.

Transferring music to a USB device results in an error.

 You are using an unsupported USB device. Check the information on the websites about compatible USB devices (page 12).

- Turn off the system and remove the USB device. If the USB device has a power switch, turn the USB device off and then on again after removing it from the system. Then perform transferring again.
- The USB device was disconnected or the power was turned off during the transfer process. Delete the partiallytransferred file, and perform transferring again. If this does not fix the problem, the USB device may be broken. Refer to the USB device operation manual for how to deal with this problem.

Files or folders on the USB device cannot be erased.

- Check if the USB device is writeprotected.
- The USB device was disconnected or the power was turned off during the erase operation. Delete the partiallyerased file. If this does not fix the problem, the USB device may be broken. Refer to the USB device operation manual for how to deal with this problem.

Are you using a supported USB device?

If you connect an unsupported USB device, some problems may occur. Check the information on the websites about compatible USB devices (page 12).

"OVER CURRENT" appears.

A problem has been detected with the level of electrical current from the <<p>(USB) port. Turn off the system and remove the USB device from the <<p>(USB) port. Make sure there is no problem with the USB device.

There is no sound.

The USB device is not connected correctly. Turn off the system and reconnect the USB device, then turn on the system and check if "USB MEMORY" lights up on the display.

There is noise, skipping, or distorted sound.

- Turn off the system and reconnect the USB device, then turn on the system.
- The music data itself contains noise, or the sound is distorted. Noise may have entered during the transfer process.
 Delete the file, and try transferring again.
- The bit rate setting used for encoding the audio file was low. Send files encoded with higher bit rates to the USB device.

The USB device cannot be connected into the •← (USB) port.

The USB device is being connected backwards. Connect the USB device in the correct orientation.

"READING" is displayed for an extended time, or it takes a long time before playback starts.

The reading process can take a long time in the following cases.

- There are many folders or files on the USB device.
- The file structure is extremely complex.
- The memory capacity is excessive.
- The internal memory is fragmented.
 Thus, Sony recommends following
- Total folders on USB device: 100 or less
- Total files per folder: 100 or less

Erroneous display

guidelines.

- Send the music data to the USB device again, as the data stored in the USB device may have been corrupted.
- The character codes that can be displayed by this system are numbers and alphabet only. Other characters are not displayed correctly.

The USB device is not recognized.

- Turn off the system and reconnect the USB device, then turn on the system.
- Check the information on the websites about compatible USB devices (page 12).
- The USB device is not working properly. Refer to the USB device operation manual for how to deal with this problem.

Play does not start.

- Turn off the system and reconnect the USB device, then turn on the system.
- Check the information on the websites about compatible USB devices (page 12).
- Press ► (or ► II on the unit) to start playback.

Play does not start from the first

Return to Normal Play by pressing PLAY MODE repeatedly until both "PGM" and "SHUF" disappear.

Files cannot be played back.

- The audio file does not have the extension ".mp3", ".wma", ".m4a", ".mp4" or ".3gp".
- The audio file is a multiple track audio file.
- · The file is a video file.
- The data is not stored in MP3/WMA/ AAC format.
- The data is stored in WMA lossless/ AAC lossless format.
- USB storage devices formatted with file systems other than FAT16 or FAT32 are unsupported.*
- If you use a partitioned USB storage device, only files on the first partition can be played.
- · Playback is possible up to 8 levels.
- The number of folders has exceeded 255.

- The number of files has exceeded 5.000.
- Files that are encrypted or protected by passwords, etc. cannot be played back.
- * This system supports FAT16 and FAT32, but some USB storage devices may not support all of these FAT. For details, refer to the operation manual of each USB storage device or contact the manufacturer.

Tuner

Severe hum or noise, or stations cannot be received. ("TUNED" or "ST" flashes on the display.)

- · Connect the antenna properly.
- Change antenna location and its orientation to obtain good reception.
- Keep the antennas away from the speaker cords, the power cord and the USB cable to avoid picking up noise.
- Consult your nearest Sony dealer if the supplied AM antenna has come off the plastic stand.
- · Turn off nearby electrical equipment.

To change the AM tuning interval

(Except for European, Russian and Saudi Arabian models) The AM tuning interval is preset to 9 kHz or 10 kHz by factory default.

- 1 Tune to any AM station, and then turn off the system.
- 2 Press DISPLAY to display the clock.
- 3 While holding down TUNING + on the unit, press I/O on the unit.

 All the AM preset stations are erased.

 To reset the interval to the factory preset, repeat the procedure.

To improve disc loading performance

Turn on the CD player/USB device power using the CD/USB power management function. By default, the CD player/USB device power is turned off.

- 1 Press FUNCTION repeatedly to select the CD function.
- **2** Press I/ $^{\circ}$ to turn off the system.
- **3** After "STANDBY" stops flashing, press DISPLAY to display the clock and then press I/(I) on the unit while holding down on the unit. "CD/USB PWR ON" appears. Turning the CD player/USB device power on, decreases disc access time and improves loading performance. If there is poor tuner reception when the CD player/USB device power is turned on, return the setting to default. To turn off the CD player/USB device power, repeat the procedure until "CD/ USB PWR OFF" appears. Note that when turning off the CD player/USB device power in the tuner function, power is not supplied to the USB device, and the device is therefore not recognized and not charged by the system, even if connected.

To reset the system to factory settings

If the system still does not operate properly, reset the system to factory settings. You cannot reset the system to factory settings in Power Saving Mode. Use buttons on the unit to reset the unit to its factory default settings.

 Disconnect and reconnect the power cord, and then turn on the system.

2 Press ■, FUNCTION and I/(¹) at the same time.

All user-configured settings, such as preset radio stations, timer, and the clock, are deleted.

To turn off the automatic standby function

This system is equipped with an automatic standby function. With this function, the system enters standby mode automatically in about 30 minutes when there is no operation and audio signal output.

By default, the automatic standby function is turned on.

Use buttons on the unit to turn off the automatic standby function.

Hold down I/U while the system is on, until "AutoSTBY OFF" appears.

To turn on the function, repeat the procedure until "AutoSTBY ON" appears.

Notes

- The message "AUTOSTBY" starts flashing on the display about 2 minutes before entering standby mode.
- The automatic standby function is not available with the FM/AM tuner function.
- The system may not enter standby mode automatically in the following cases;
 - when an audio signal is detected.
 - when a USB device is connected.
 - during playback of audio tracks or files.
 - while the preset Play Timer or Sleep Timer is in process.

Messages

One of the following messages may appear or flash on the display during operation.

COMPLETE

- The radio preset operation ended normally.
- The audio file or folder on the USB device has been erased.

DATA ERROR

You tried to play an unplayable file on the USB device.

DEVICE ERROR

The USB device could not be recognized or an unknown device is connected (page 24, 25).

DEVICE FULL

The USB device is full.

ERASE ERROR

Erase of audio files or folders on the USB device failed.

FATAL ERROR

The USB device has been disconnected while transferring or erasing audio files/folders on the USB device.

FOLDER FULL

The number of folders on the USB device has reached its maximum.

FULL

You tried to program more than 25 tracks or files (steps).

LOCKED

The disc tray does not open. Contact your nearest Sony dealer.

NO DISC

There is no disc in the player, or you have loaded a disc that cannot be played.

NO MEMORY

The memory selected for playback or transfer has no memory media inserted in the USB device.

NO STEP

All of the programmed tracks have been erased.

NO SUPPORT

An unsupported USB device is connected.

NO TRACK

Playable file on the USB device is not loaded in the system.

NOT USED

You tried to perform a specific operation under conditions where that operation is prohibited.

NoDEVICE

No USB device is connected or the connected USB device has been stopped.

OVER

You have reached the end of the disc while pressing \longrightarrow during playback or pause.

OVER CURRENT

An over current from the \Leftrightarrow (USB) port was detected.

PROTECT

See "If "PROTECT" appears on the display" (page 22) to check what to do if this message appears.

PROTECTED

You tried to perform transferring or erase operation against a write-protected USB device.

PUSH SELECT

You tried to set the clock or timer during timer operation.

PUSH STOP

- You have pressed PLAY MODE during playback.
- You have pressed the buttons whose operation is only possible when playback is stopped.

READING

- The system is reading information of the disc. Some buttons are not available.
- The system is recognizing the USB device.

REC ERROR

Transferring did not start, stopped partway, or otherwise could not be performed (page 24).

REMOVED

The USB device has been removed.

SET CLOCK

You tried to select the timer when the clock is not set.

SET TIMER

You tried to select the timer when the Play Timer is not set.

TIME NG

The Play Timer start and end times are set to the same time.

TRACK FULL

The number of files on the USB device has reached its maximum.

Specifications

Main unit

Amplifier section

The following measured at AC 127 V, 60 Hz (Mexican model)
The following measured at AC 220 V, 50/60 Hz (Argentine model)

The following measured at AC 230 V,

50/60 Hz (Other models)

MHC-EX99/EX900

Front Speaker:

Power output (rated):

 $80 \text{ W} + 80 \text{ W} \text{ (at } 3 \Omega, 1 \text{ kHz}, 1\% \text{ THD)}$

RMS output power (reference):

135 W + 135 W (per channel at 3 Ω , 1 kHz)

Subwoofer:

RMS output power (reference):

200 W (at 8 Ω, 100 Hz)

MHC-EX88/EX700

Power output (rated):

120 W + 120 W (at 4 Ω, 1 kHz, 1%

RMS output power (reference):

200 W + 200 W (per channel at 4 Ω , 1 kHz)

MHC-EX66/EX600

Power output (rated):

 $50 \text{ W} + 50 \text{ W} \text{ (at 4 }\Omega, 1 \text{ kHz}, 1\% \text{ THD)}$

RMS output power (reference):

90 W + 90 W (per channel at 4 Ω , 1 kHz)

Inputs

DVD/PC IN L/R (phono jacks):

Sensitivity 700 mV, impedance 22 k Ω

Outputs

PHONES (stereo mini jack):

accepts headphones with an impedance of 8 Ω or more

SPEAKERS:

MHC-EX99/EX900: impedance 3 Ω MHC-EX88/EX700/EX66/EX600:

impedance 4 Ω

SUBWOOFER (MHC-EX99/EX900 only): impedance 8Ω

mpedance

USB section

Supported bit rate:

MP3 (MPEG 1 Audio Layer-3):

32 kbps – 320 kbps, VBR

WMA: 48 kbps – 192 kbps AAC: 48 kbps – 320 kbps

Sampling frequencies:

MP3 (MPEG 1 Audio Layer-3):

32/44.1/48 kHz WMA: 44.1 kHz

AAC: 44.1 kHz

← (USB) port:

Maximum current: 500 mA

CD player section

System:

Compact disc and digital audio system Laser Diode Properties

Emission Duration: Continuous

Laser Output*: Less than 44.6 uW

* This output is the value measurement at a distance of 200mm from the objective lens surface on the Optical Pick-up Block with 7mm aperture.

Frequency response: 20 Hz – 20 kHz Signal-to-noise ratio: More than 90 dB Dynamic range: More than 88 dB

Tuner section

FM stereo, FM/AM superheterodyne tuner Antenna:

FM lead antenna AM loop antenna

FM tuner section:

Tuning range:

87.5 MHz – 108.0 MHz (50 kHz step) Intermediate frequency:

200/250/300/350/400 kHz

AM tuner section:

Tuning range

Latin American models:

 $530 \; kHz - 1{,}710 \; kHz \; (10 \; kHz \; step)$

531 kHz – 1,710 kHz (9 kHz step)

European, Russian and Saudi Arabian models:

531 kHz – 1,602 kHz (9 kHz step) Other models:

531 kHz - 1,602 kHz (9 kHz step)

530 kHz - 1,610 kHz (10 kHz step)

Intermediate frequency: 400 kHz

Speaker

Front Speaker

SS-EX99 for MHC-EX99 SS-EX900 for MHC-EX900 SS-EX88 for MHC-EX88 SS-EX700 for MHC-EX700

Speaker system:

2-way 2-driver speaker system, Bass reflex

Speaker unit:

Woofer: 180 mm, cone type Tweeter: 40 mm, horn type

Rated impedance:

MHC-EX99/EX900: 3 Ω MHC-EX88/EX700: 4 Ω

Dimensions (W/H/D):

Approx. 230 mm \times 340 mm \times 210 mm

Mass: Approx. 3.0 kg Quantity: 2 pieces

SS-EX66 for MHC-EX66 SS-EX600 for MHC-EX600

Speaker system:

2-way 2-driver speaker system, Bass reflex

Speaker unit:

Woofer: 150 mm, cone type

Tweeter: 40 mm, horn type Rated impedance: 4 Ω

Dimensions (W/H/D):

Approx. 202 mm \times 306 mm \times 210 mm

Mass: Approx. 2.5 kg Quantity: 2 pieces

Subwoofer

SS-WG900 for MHC-EX99/EX900

Speaker system:

Subwoofer system, Bass reflex

Speaker unit:

Subwoofer: 200 mm, cone type

Rated impedance: 8Ω Dimensions (W/H/D):

Approx. 282 mm \times 306 mm \times 295 mm

Mass: Approx. 4.6 kg Quantity: 1 piece

General

Power requirements

Mexican model:

AC 127 V, 60 Hz

European, Argentine and Russian models:

AC 220 V - 240 V, 50/60 Hz

Other models:

AC 120 V - 240 V, 50/60 Hz

Power consumption

MHC-EX99/EX900: 85 W

(0.5 W at the Power Saving Mode)

MHC-EX88/EX700: 70 W

(0.5 W at the Power Saving Mode)

MHC-EX66/EX600: 45 W

(0.5 W at the Power Saving Mode)

Dimensions (W/H/D) (excl. speakers):

Approx. 210 mm \times 312 mm \times 375 mm

Mass (excl. speakers)

MHC-EX99/EX900/EX88/EX700:

Approx. 3.8 kg

MHC-EX66/EX600: Approx. 3.6 kg

Quantity of the main unit: 1 piece

Supplied accessories: Remote Commander (1), R6 (Size AA) batteries (2), FM lead/AM loop antenna (1)

Design and specifications are subject to change without notice.

Standby power consumption: 0.5 W

http://www.sony.net/





